DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 49727 8/15/2000]

[Docket No. 2000-SW-05-AD; Amendment 39-11853; AD 2000-15-20]

RIN 2120-AA64

Airworthiness Directives; Agusta S.p.A. Model A109A and A109A II Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) for Agusta S.p.A. (Agusta) Model A109A and A109A II helicopters. This AD requires radiographic inspections of the internal surface of each main rotor blade spar (spar) for corrosion. This AD is prompted by the discovery of corrosion on the internal surfaces of the spar in the area adjacent to the main rotor blade inertia balance weights. The actions specified by this AD are intended to prevent failure of a main rotor blade due to corrosion on the internal surface of the spar and subsequent loss of control of the helicopter.

DATES: Effective September 19, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of September 19, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Agusta, 21017 Cascina Costa di Samarate (VA), Via Giovanni Agusta 520, telephone (0331) 229111, fax (0331) 229605-222595. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Jim Grigg, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations Group, Fort Worth, Texas 76193-0111, telephone (817) 222-5490, fax (817) 222-5961. **SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD for Agusta Model A109A and A109A II helicopters was published in the **Federal Register** on May 3, 2000 (65 FR 25692). That action proposed to require radiographic inspections of the upper and lower sides of each main rotor blade for spar corrosion. That action also proposed to require an initial radiographic inspection with recurring radiographic inspections at intervals not to exceed 24 months. If corrosion is detected at the STA 1354 centered radiographic inspection, removing the blade from service was proposed. If corrosion is detected at the STA 2825 centered radiographic inspection, additional inspections either by eddy current at intervals not to exceed 25 hours time-in-service (TIS) or by dye penetrant at intervals not to exceed 10 hours TIS were proposed.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposal or the FAA's determination of the cost to the public. The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

The FAA estimates that 54 helicopters of U.S. registry will be affected by this AD. It will take approximately 10 work hours for the initial radiographic inspection and 4 work hours for each eddy current inspection per helicopter and the average labor rate is \$60 per work hour. Based on these figures, the total cost impact of this AD on U.S. operators is estimated to be \$343,440 assuming every helicopter requires an eddy current inspection each month for a 24-month interval and assuming that no blade will need to be replaced.

1

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not

have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

AIRWORTHINESS DIRECTIVE

REGULATORY SUPPORT DIVISION P.O. BOX 26460 OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department of Transportation Federal Aviation Administration

AD's are posted on the internet at http://av-info.faa.gov

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39, 3).

2000-15-20 AGUSTA S.p.A.: Amendment 39-11853. Docket No. 2000-SW-05-AD.

Applicability: Model A109A and A109A II helicopters, with main rotor blade part number (P/N) 109-0103-01-(all dash numbers except P/N 109-0103-01-115), installed, certificated in any category.

NOTE 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of a main rotor blade due to corrosion on the internal surface of the spar and subsequent loss of control of the helicopter, accomplish the following:

- (a) Within 25 hours time-in-service (TIS), perform a radiographic inspection of the upper and lower surfaces of each main rotor blade for internal corrosion on the spar in accordance with (IAW) Part I, paragraph 4, of Agusta Service Bulletin No. 109-111, dated October 14, 1999 (ASB).
- (1) If no corrosion is detected, re-identify the blade by vibro-etching the letter "R" after the serial number on the nameplate.
- (2) If corrosion is detected at the STA 1354 centered inspection, remove the affected blade from service before further flight.
- (3) If corrosion is detected at the STA 2825 centered inspection, re-identify the blade by vibro-etching the letters "RC" after the serial number on the nameplate.
- (b) After re-identifying a blade with the letter "R" after the serial number on the nameplate in accordance with paragraph (a)(1) of this AD, at intervals not to exceed 24 months, repeat the radiographic inspection IAW Part I, paragraph 4, of the ASB.
- (1) If corrosion is detected at the STA 1354 centered inspection, remove the affected blade from service before further flight.
- (2) If corrosion is detected at the STA 2825 centered inspection, re-identify the blade by vibro-etching the letter "C" after the letter "R" previously vibro-etched on the nameplate after the serial number.
- (c) After re-identifying a blade with the letters "RC" after the serial number on the nameplate IAW paragraph (a)(3) or (b)(2) of this AD,
- (1) At intervals not to exceed 24 months, repeat the STA 1354 centered radiographic inspection IAW Part I, paragraph 4.3 of the ASB, and
 - (2) Perform either:
- (i) An eddy current inspection and, thereafter, at intervals not to exceed 25 hours TIS, repeat the eddy current inspection centered at STA 2825 in accordance with Part II, paragraph 1, of the ASB, or
- (ii) A dye penetrant inspection and, thereafter, at intervals not to exceed 10 hours TIS, repeat the dye-penetrant inspection centered at STA 2825 IAW with Part II, paragraph 2, of the ASB.
- (3) If corrosion is detected at the STA 1354 centered radiographic inspection or if a crack is detected at the STA 2825 centered eddy currant or dye penetrant inspection, remove the affected blade from service before further flight.
- (d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Regulations Group, Rotorcraft Directorate, FAA.

Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Regulations Group.

- (e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.
- (f) The inspections and modifications shall be done in accordance with Part I, paragraphs (4) and 4.3, and Part II, paragraph 1 or 2, of Agusta Service Bulletin No. 109-111, dated October 14, 1999. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5U.S.C. 552(a) and 1 CFR part 51. Copies of the service bulletin may be obtained from Agusta, 21017 Cascina Costa di Samarate (VA), Via Giovanni Agusta 520, telephone (0331) 229111, fax (0331) 229605-222595. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.
 - (g) This amendment becomes effective on September 19, 2000.

NOTE 3: The subject of this AD is addressed in Registro Aeronautico Italiano (Italy) AD No. 99-413, dated October 19, 1999.

FOR FURTHER INFORMATION CONTACT: Jim Grigg, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations Group, Fort Worth, Texas 76193-0111, telephone (817) 222-5490, fax (817) 222-5961.

Issued in Fort Worth, Texas, on August 1, 2000.

Henry A. Armstrong, Manager, Rotorcraft Directorate, Aircraft Certification Service.